HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 1371 Traffic and Pedestrian Safety
SPONSOR(S): Transportation & Infrastructure Subcommittee, Fine and others
TIED BILLS: **IDEN./SIM. BILLS:** CS/SB 1000

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Transportation & Infrastructure Subcommittee	13 Y, 0 N, As CS	Roth	Vickers
2) Transportation & Tourism Appropriations Subcommittee		Hicks	Davis
3) State Affairs Committee			

SUMMARY ANALYSIS

Florida law provides the driver of a vehicle must stop for a pedestrian who is walking in the crosswalk at the instruction of a traffic control signal or where signage indicates the driver must stop. If there are no traffic control signals or signage in place at a crosswalk, the driver of a vehicle must yield to a pedestrian who is on the half of the roadway on which the vehicle is traveling. If traffic control signals are in operation, pedestrians may not cross at any place except in a marked crosswalk. If there is no crosswalk, pedestrians crossing a roadway must yield to vehicles.

The Department of Transportation (DOT) and local governments utilize various types of signals to indicate when pedestrians may safely cross midblock crosswalks (crosswalks that are not at an intersection). Two types of signals commonly used are a rectangular rapid flash beacon (RRFB) and a pedestrian hybrid beacon (PHB). The RRFB consists of two rapidly and alternately flashing yellow rectangular LED lights that function as a warning beacon. Pedestrians press the call button to activate the flashing lights, but should wait for motorists to clear the intersection before they cross. The PHB consists of three signal sections with a circular yellow signal indication centered below two horizontally aligned circular red signal indications. The PHB is not illuminated until a pedestrian activates it and triggers the warning flashing yellow lens on the major street. After a set amount of time, the indication changes to a solid yellow light to inform drivers to prepare to stop. The beacon then displays a dual solid red light to drivers and a walking person symbol to pedestrians on the crosswalk.

The bill requires that by October 1, 2024, an entity with jurisdiction over a public highway, street, or road must install PHB at any midblock crosswalk or must remove the midblock crosswalk in its entirety. As of October 1, 2024, midblock crosswalks will no longer be authorized to use RRFB. The state, county, city, or municipality with jurisdiction over the roadway with the midblock crosswalk will be responsible for the cost.

The bill provides a statement that the Legislature finds that this bill fulfills an important state interest.

The bill will likely have a significant, negative fiscal impact to state and local governments. *See* Fiscal Analysis for details.

The bill provides an effective date of July 1, 2020.

This bill may be a county or municipality mandate requiring a two-thirds vote of the membership of the House. *See* Section III.A.1 of the analysis.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Current Situation

Unless directed otherwise by a law enforcement officer, pedestrians are required to obey the instructions of official traffic control devices that are specifically applicable to pedestrians.[1] If a sidewalk is provided, and no circumstances prevent a pedestrian's use of the sidewalk, a pedestrian is prohibited from walking on a roadway that is paved for vehicular traffic.[2] If a sidewalk is not provided, a pedestrian, when practicable, must walk only on the shoulder on the left side of the roadway in relation to the pedestrian's direction of travel, facing traffic that may approach from the opposite direction.[3]

The driver of a vehicle must stop for a pedestrian who is walking in the crosswalk at the instruction of a traffic control signal or where signage indicates the driver to stop. If there are no traffic control signals or signage in place at a crosswalk, the driver of a vehicle must yield to a pedestrian who is on the half of the roadway on which the vehicle is traveling.[4] If traffic control signals are in operation, pedestrians cannot cross at any place except in a marked crosswalk.[5] If there are no crosswalks, pedestrians crossing a roadway must yield to vehicles.[6]

When pedestrian traffic control signals or signage is installed, such indicators must conform to the requirements of the most recent Manual on Uniform Traffic Control Devices (MUTCD).[7] The MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel. The Federal Highway Administration (FHWA) publishes the MUTCD.[8]

The Department of Transportation (DOT) and local governments utilize various types of signals to indicate when pedestrians may safely cross midblock crosswalks.[9] Two types of signals commonly used by DOT and local governments are a rectangular rapid flash beacon (RRFB) and a pedestrian hybrid beacon (PHB).[10] The RRFB consists of two rapidly and alternately flashing yellow rectangular LED lights that function as a warning beacon.[11] Pedestrians press the call button to activate the flashing lights, but should wait for motorists to clear the intersection before they cross.[12] The PHB consists of three signal sections with a circular yellow signal indication centered below two horizontally aligned circular red signal indications.[13] The PHB is not illuminated until a pedestrian activates it and triggers the warning flashing yellow lens facing the street.[14] After a set amount of time, the indication changes to a solid yellow light to inform drivers to prepare to stop.[15] The beacon then displays a dual solid red light to drivers on the street and a walking person symbol to pedestrians on the crosswalk.[16] At the conclusion of the walk phase, the beacon displays an alternating flashing red light, and

[1] Section 316.130(1), F.S.
[2] Section 316.130(3), F.S.
[3] Section 316.130(4), F.S.
[4] Section 316.130(7), F.S.
[5] Section 316.130(11), F.S.
[6] Section 316.130(10), F.S.
[7] Section 316.0755, F.S.
[8] US Department of Transportation, *Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)*, (updated December 11, 2019), available at https://mutcd.fhwa.dot.gov/ (last visited January 23, 2020).
[9] Florida Department of Transportation, *Pedestrian Facilities*, available at https://www.fdot.gov/roadway/bikeped/bikepedpf.shtm (last visited January 23, 2020).
[10] *Id.*
[11] *Id.*
[12] *Id.*
[13] US Department of Transportation, *Safety Effectiveness of the HAWK Pedestrian Crossing Treatment* (July 2010), available at https://www.fhwa.dot.gov/publications/research/safety/10045/index.cfm (last visited January 23, 2020).
[14] *Id.*
[15] *Id.*
[16] *Id.*

pedestrians are shown an upraised hand symbol with a countdown display informing them of the time remaining to cross the street.[17]

In July 2008, the MUTCD was updated to provide interim approval via a memorandum[18] to RRFBs for optional use in limited circumstances. The interim approval allows RRFBs usage as a warning beacon to supplement standard pedestrian crossing warning signs and markings at either a pedestrian or school crossing.[19] The cost is approximately $10,000 to $15,000 for purchase and installation of two RRFB units (one on either side of a street).[20] The FHWA will grant interim approval for the optional use of the RRFB as a warning beacon in addition to standard pedestrian crossing or school crossing signs at crosswalks to any jurisdiction that submits a written request to the Office of Transportation Operations.[21] A state may request interim approval for all jurisdictions in that state.[22]

As of October 2019, DOT reported 4,900 midblock crosswalks without traffic signals or RRFBs and approximately 191 midblock crosswalks with RRFBs on the state highway system.[23] It is unknown how many midblock crosswalks are in use statewide on county and city roads.[24]

The process for installing a PHB is set out in the MUTCD.[25] A PHB may be considered for installation to facilitate pedestrian crossings at a location that does not meet the requirements of a traffic signal need study,[26] or at a location that meets the requirements of a traffic signal need study, but a decision is made not to install a traffic control signal.[27] If certain traffic and pedestrian patterns exist,[28] the need for a PHB should be considered based on an engineering study of major-street volumes, speeds, widths, and gaps in conjunction with pedestrian volumes, walking speeds, and delay.[29] The results of the engineering study will determine the necessity of the PHB.[30] If installed, the PHB must be used in conjunction with signs and pavement markings to warn and control traffic at locations where pedestrians enter or cross a street or highway.[31] A PHB can only be installed at a marked crosswalk.[32] When an engineering study finds that installation of a PHB is justified, then at least two PHB lights must be installed for each approach of the major street; a stop line must be installed for each approach to the crosswalk; and a pedestrian signal light must be installed at each end of the marked crosswalk.[33] DOT reports that the conversion of five RRFBs to PHBs at midblock crosswalks in Destin cost $1,035,661 and that the conversion of one RRFB to a PHB at a midblock crosswalk in Tallahassee cost $386,658.[34]

Pedestrians who cross the street at midblock crosswalks are likely more susceptible to injury from contact with a motor vehicle than crosswalks at an intersection. The below table displays the number of pedestrians and bicyclists that were struck at midblock crossings the past three years.

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[17] *Id.*

[18] *See Memorandum of Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (IA-11)* (July 16, 2008), available at https://mutcd.fhwa.dot.gov/resources/interim_approval/ia11/fhwamemo.htm (last visited January 23, 2020).

[19] US Department of Transportation, *Rectangular Rapid Flash Beacon (RRFB)*, available at https://safety.fhwa.dot.gov/intersection/conventional/unsignalized/tech_sum/fhwasa09009/ (last visited January 23, 2020).

[20] *Id.*

[21] Memorandum of Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (IA-11), *supra*, at FN 18.

[22] *Id.*

[23] Department of Highway Safety and Motor Vehicles, Agency Analysis of 2020 House Bill 1371, p.5 (November 20, 2019).

[24] Email from Amanda Marsh, Legislative Specialist, Department of Transportation, RE: Midblock crosswalks, (October 18, 2019).

[25] US Department of Transportation Federal Highway Administration, *Manual on Uniform Traffic Control Devices for Streets and Highways (2009 edition), Chapter 4F. Pedestrian Hybrid Beacons*, p. 509 - 512, available at https://mutcd.fhwa.dot.gov/pdfs/2009/mutcd2009edition.pdf (last visited January 23, 2020).

[26] *See* MUTCD Chapter 4C.

[27] *Id.* at p. 509.

[28] Such as gaps in traffic that are not adequate to permit pedestrians to cross, or if the speed for vehicles approaching on the major street is too high to permit pedestrians to cross, or if pedestrian delay is excessive.

[29] *Id.*

[30] *Id.*

[31] *Id.*

[32] *Id.*

[33] *Id.*

[34] Email from Amanda Marsh, Legislative Specialist, Department of Transportation, RE: Midblock crosswalks, (October 22, 2019).

Injury or Death to Non-Motorists at Midblock Crossings[35]

Injury Level	2017	2018	2019
Midblock - Marked Crosswalk	**263**	**262**	**247**
Pedestrian	**164**	**157**	**157**
Fatal (within 30 days)	12	6	5
Incapacitating	30	22	16
Non-incapacitating	61	57	78
Possible	56	65	50
None	5	7	8
Bicyclist	**99**	**105**	**90**
Fatal (within 30 days)	0	2	0
Incapacitating	15	12	9
Non-incapacitating	33	44	40
Possible	45	39	36
None	6	8	5
As of 01/24/2020. 2019 statistics is preliminary and may change.			

Effect of Proposed Changes

The bill creates s. 316.0756, F.S., and requires by October 1, 2024, that an entity with jurisdiction over a public highway, street, or road must install PHBs at any midblock crosswalk or must remove the midblock crosswalk in its entirety. As of October 1, 2024, midblock crosswalks will no longer be authorized to use RRFBs. The state, county, city, or municipality with jurisdiction over the roadway with the midblock crosswalk will be responsible for the cost.

Additionally, the bill specifies that traffic control signal devices and pedestrian control signals must conform to the requirements provided in chapters 4D (Traffic Control Signal Features) and 4E (Pedestrian Control Features) of the Manual on Uniform Traffic Control Devices.

Lastly, the bill provides that the Legislature finds and declares that the installation of specified traffic and pedestrian signals on roadways fulfills an important state interest.

B. SECTION DIRECTORY:

Section 1: Creates s. 316.0756, F.S., relating to traffic control signal devices and pedestrian control signals at crosswalks other than at intersections.

Section 2: Provides an effective date of July 1, 2020.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

   The bill will likely have no impact on state government revenues.

2. Expenditures:

[35] Email from Kevin Jacobs, Deputy Legislative Affairs Director, Department of Highway Safety and Motor Vehicles, RE: non/motorists/midblock crosswalk stats, (January 24, 2020).

DOT reports a significant negative fiscal impact of $47 million to convert uncontrolled midblock crosswalks and midblock crosswalks with RRFBs to midblock crosswalks with PHBs. DOT efforts would be limited to midblock crosswalks located on the state highway system. DOT has identified in their inventory 4,900 uncontrolled midblock crosswalks and 191 midblock crosswalks with RRFBs. The department assumes 20 percent of the RRFB locations will warrant either a traffic signal or a PHB. The cost to replace an uncontrolled midblock crosswalk with a traffic signal or PHB is approximately $300,000; and the cost to remove an uncontrolled midblock crosswalk is approximately $7,000. If a traffic signal is installed, the annual maintenance cost is approximately $3,200. In the event a signal warrant engineering study is required, the cost would be an additional $10,000 per location.[36]

Of the total cost, $11.4 million is for the construction cost associated with the conversion of a location and $35.4 million is for the construction cost to remove midblock crosswalks altogether. These costs are inclusive of site assessments and the purchase of signal and pedestrian control equipment.

The fiscal impact is contained within the confines of the Work Program. Due to the fluid and dynamic nature of the Work Program, the fiscal impact may be partially mitigated by normal changes which may occur with projects throughout the year. The bill also specifies a full implementation date of October 1, 2024, effectively spreading the fiscal impact over a 4-year period before required compliance.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

The bill will likely have no impact on local government revenues.

2. Expenditures:

The fiscal impact to cities and counties is indeterminate, but is likely significant. It is unknown how many midblock crosswalks are in use statewide on county and city roads.[37] The cost to replace an uncontrolled midblock crosswalk with a traffic signal or PHB is approximately $300,000; and the cost to remove an uncontrolled midblock crosswalk is approximately $7,000. If a traffic signal is installed, the annual maintenance cost is approximately $3,200. In the event a signal warrant engineering study is required, the cost would be an additional $10,000 per location.[38]

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill will likely have no fiscal impact on the private sector.

D. FISCAL COMMENTS:

According to DOT, the potential installation of an unwarranted traffic signal that does not comply with MUTCD standards may cause potential liability to state and local governments. In addition, because existing RRFBs were likely installed as a safety improvement using federal funds, their removal may result in non-compliance with MUTCD standards and impact federal funding eligibility.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

[36] Department of Transportation, Agency Analysis of 2020 House Bill 1371, p. 4-5 (November 20, 2019).
[37] Email from Amanda Marsh, Legislative Specialist, Department of Transportation, RE: Midblock crosswalks, (October 18, 2019).
[38] Department of Transportation, Agency Analysis of 2020 House Bill 1371, p. 4 (November 20, 2019).

The county/municipality mandates provision of Article VII, section 18, of the Florida Constitution may apply because this bill requires cities/counties to install specified traffic and pedestrian signals on roadways. This bill does not appear to qualify under any exemption or exception. If the bill does qualify as a mandate, the law must fulfill an important state interest and final passage must be approved by two-thirds of the membership of each house of the Legislature.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill does not provide a grant of rulemaking authority, nor does it require rulemaking.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On January 28, 2020, the Transportation & Infrastructure Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment:

- Specified that traffic control signal devices and pedestrian control signals must conform to the requirements provided in chapters 4D and 4E of the Manual on Uniform Traffic Control Devices.
- Provided that the Legislature finds and declares that the installation of specified traffic and pedestrian signals on roadways fulfills an important state interest.

This analysis is written to the committee substitute as reported favorably by the Transportation & Infrastructure Subcommittee.